

PRELIMINARY AMENDMENT
U.S. Appl. No. 09/866,610

REMARKS

Claims 1-15 are all the claims pending in the application.

The specification has been amended to correct typographical and spelling errors.

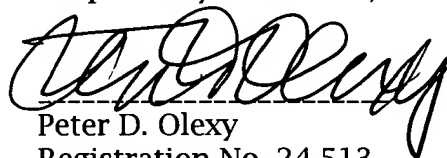
The specification and claims 1, 2 and 4 were amended to correct a translation error (i.e., "viscous polysaccharides" was replaced with --thickening polysaccharides--). Compare page 6, lines 13-15 with page 13, lines 4-8. "Viscous" should obviously be "thickening".

Claim 7 was amended to depend only from claim 4 and new claims 12-13, which correspond to claim 7 and depend from claims 5 and 6, were added to correct the improper multiple dependency of claim 7.

Claims 14-15, which correspond to claim 8 and depend from claims 12-13, respectively, were added.

Entry and consideration of this Amendment is respectfully requested.

Respectfully submitted,



Peter D. Olexy
Registration No. 24,513

SUGHRUE MION, PLLC
2100 Pennsylvania Avenue, N.W.
Washington, D.C. 20037-3213
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

Date: November 6, 2001

APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION:

The specification is changed as follows:

Page 2, the paragraph bridging pages 2 and 3:

Recently, Japanese Patent Laid-Open No. 44878/2000 proposes to use as a coating material a fractionated yeast cell wall comprising a yeast cell residue obtained by removing soluble intracellular ingredients from enzyme-treated yeast cells, or an acid-treated yeast cell fraction composed of a residue obtained by treating with an acidic aqueous solution a yeast cell residue prepared by removing soluble intracellular ingredients from enzyme-treated yeast cells, and these fractionated yeast cell walls being commercially available. Although this publication describes to incorporate a plasticizer in the coating material, it does not disclose to use as a coating material a combination of these fractionated yeast cell walls and at least one member selected from the group consisting of [viscous] thickening polysaccharides, oligosaccharides, hardened fats and oils, waxes, sugar alcohols and starch hydrolyzates.

Page 5, the paragraph bridging pages 5 and 6:

As a result of intensive investigations to solve the above-described problems, the inventors have found that a coated powder is excellent in various properties such as flavor-keeping properties, flavor release-controlling ability, and oxidation stability, when a powdery or granular core substance is coated with a coating material comprising (A)(a1) a fractionated yeast cell wall comprising a yeast cell residue obtained by removing soluble intracellular ingredients from enzyme-treated yeast or

PRELIMINARY AMENDMENT
U.S. Appl. No. 09/866,610

(a2) an acid-treated yeast cell fraction comprising a residue obtained by treating with an acidic aqueous solution a yeast cell residue prepared by removing soluble intracellular ingredients from enzyme-treated yeast cells, and removing solubilized ingredients therefrom (in the invention, both (a1) and (a2) being referred to as "fractionated yeast cell wall") and (B) at least one member selected from the group consisting of [viscous] thickening polysaccharides, oligosaccharides, hardened fats and oils, waxes, sugar alcohols and starch hydrolyzates, thus having completed the invention based on the finding.

Page 6, the second and third full paragraphs:

(1) A coating material containing a fractionated yeast cell wall and at least one member selected from the group consisting of [viscous] thickening polysaccharides, oligosaccharides, hardened fats and oils, waxes, sugar alcohols and starch hydrolyzates.

(2) The coating material as described in (1) described above, wherein the [viscous] thickening polysaccharide is pullulan.

Page 6, the paragraph bridging pages 6 and 7:

(4) A coated powder composed of a core substance in a powdery or granular form of 30 to 3000 μm in an average particle size coated with 0.05 to 1.5 parts by weight of a coating material containing a fractionated yeast cell wall and at least one member selected from the group consisting of [viscous] thickening polysaccharides, oligosaccharides, hardened fats and oils, waxes, sugar alcohols per 1 part by weight of the core substance.

Page 7, the first full paragraph:

(5) The coated powder as described in (4) described above, wherein the [viscous] thickening polysaccharide is pullulan.

Page 7, the third full paragraph:

~~(7) The coated powder as described in one of (4) to (6) described above, wherein the core substance is a flavor composition, a [colour] color material, an acidity regulator, a seasoning, a sweetener, a spice, a vitamin, a functional material or a mixture of two or more of them.~~

Page 7, the paragraph bridging pages 7 and 8:

(11) A process for producing a coated powder, which comprises spraying a solution of a coating material containing a fractionated yeast cell wall and at least one member selected from the group consisting of [viscous] thickening polysaccharides, oligosaccharides, hardened fats and oils, waxes, sugar alcohols and starch hydrolyzates against a core substance in a powdery or granular form of 30 to 3000 μm in an average particle size under stirring or in a fluidized state to thereby coat the core substance with 0.05 to 1.5 parts by weight of the coating material per 1 part by weight of the core substance.

Page 8, the second full paragraph:

As the specific examples of the core substance to be used in the invention, there are illustrated a powdery or granular flavor composition, [colour] color material, acidity regulator, seasoning, sweetener, spice, vitamin, functional material or mixture thereof having an average particle size of 30 to 3000 μm . However, any substance that

PRELIMINARY AMENDMENT
U.S. Appln. No. 09/866,610

is solid at ordinary temperatures may be used. In cases when the core substance is a flavor composition, the invention provides a coated powder showing better flavor-keeping properties and better controlled flavor release in comparison with flavor powders produced by conventional coating methods, thus a flavor composition being one of preferred-core-substances.

Page 9, the first full paragraph:

The flavor ingredient of the flavor composition to be used in the invention as a core substance includes any of conventionally known flavor ingredients. Such flavor ingredient is exemplified by [citrous] citrus flavors such as orange, lemon and grapefruit; fruit type flavors such as apple, banana, grape, peach, strawberry and pineapple; mint type flavors such as peppermint and spearmint; spice type flavors such as pepper, cinnamon, nutmeg and clove; nut type flavors such as vanilla, coffee, cocoa and hazelnut; tea type flavors such as black tea and green tea; meat or marine product type flavors such as [beaf] beef, chicken, salmon and crab; and dairy type flavors such as milk and cheese. However, flavor ingredients to be used in the invention are not limited only to these.

Page 10, the first full paragraph:

In using a [colour] color material as the core substance material, every conventionally known [colours] colors may be used as the [colour] color material. Specific examples of the [colour] color material include oil-soluble natural [colours] colors such as β -carotene, paprika [colour] color, annatto [colour] color and chlorophyll and, further, natural [colour] color materials such as turmeric [colour] color, caramel

PRELIMINARY AMENDMENT
U.S. Appl. No. 09/866,610

[colour] color, cochineal [colour] color and grape skin extract. These [colour] color materials are usually formed into powder using an emulsifier or a carrier to use as a core substance.

Page 13, the first full paragraph:

~~As the [thckening] thickening polysaccharides to be used in the invention in combination with the fractionated yeast cell wall, there are illustrated carrageenan, carob bean gum and pullulan, with pullulan being preferred in the point of film-forming properties and heat resistance.~~

Page 13, the paragraph bridging pages 13 and 14:

As the hardened fats and oils, any of those fats hardened and oils which have a melting point of 40°C or higher than that may be used. As examples of hardened fats and oils to be preferably used in the invention, there are illustrated hardened fats and oils obtained by hydrogenation-treating food-grade liquid vegetable oils such as rape seed oil, soybean oil, cotton seed oil, safflower oil, sunflower oil, palm oil, coconut oil, olive oil, [sesami] sesame oil, rice oil, corn oil and peanut oil, and hydrogenated products of beef tallow, lard and fish-and-whale oil.

Page 14, the paragraph bridging pages 14 and 15:

The coating material is used in an amount of preferably 0.05 to 1.5 parts by weight per 1 part by weight of a core substance. If used in a less amount than this range, the coating material would fail to sufficiently coat the core substance such as a flavor powder whereas, if used in a more amount than is necessary, there would be obtained functionally unfavorable results when the resultant coated powder is added

PRELIMINARY AMENDMENT
U.S. Appln. No. 09/866,610

to, for example, foods or [beveradges] beverages to impart flavor to final products. In the present invention, combined use of one or more members selected from among [viscous] thickening polysaccharides, oligosaccharides, hardened fats and oils, waxes and sugar alcohols and the starch hydrolyzate provides a coated powder more excellent in coating properties, oxidation stability, heat resistance, sustained and controlled flavor-releasing properties in comparison with the case of using a fractionated yeast cell wall not containing them as the coating material.

Page 15, the paragraph bridging pages 15 and 16:

To illustrate the range of the amount of these materials to be used in combination with the fractionated yeast cell wall by reference to typical materials, the [viscous] thickening polysaccharides such as pullulan are used in an amount of preferably 0.0001 to 5.0 parts by weight, more preferably 0.001 to 4.0 parts by weight based on 1 part by weight of the fractionated yeast cell wall. The oligosaccharides such as trehalose are used in an amount of preferably 0.01 to 5.0 parts by weight, more preferably 0.1 to 4.0 parts by weight, the sugar alcohols such as glycerin are used in an amount of preferably 0.0001 to 0.5 parts by weight, more preferably 0.001 to 0.3 parts by weight, and starch hydrolyzates such as cyclodextrin are used in an amount of preferably 0.0001 to 5.0 parts by weight, more preferably 0.001 to 4.0 parts by weight based on 1 part by weight of the fractionated yeast cell wall. If the amounts are less than the lower limits described above, effects by the combined use with the fractionated yeast cell wall might not be obtained. On the other hand, if more than the upper limits, no additional effects can be obtained with respect to the [viscous]

PRELIMINARY AMENDMENT
U.S. Appln. No. 09/866,610

thickening polysaccharides, oligosaccharides and starch hydrolyzates, thus such amounts exceeding the upper limits being economically useless and, with respect to materials classified as sugar alcohols, a step for drying them requires the upper limits.

Page 16, the paragraph bridging pages 16 and 17:

~~In addition, the combined use of the fractionated yeast cell wall with at least one of the [viscous] thickening polysaccharides and oligosaccharides provide a coated~~ powder having a particularly enhanced oxidation stability. Thus, a coated powder having the functions of sufficient oxidation stability, heat resistance, controlled-release properties, and the like can be prepared by coating a core substance with a combination of a natural coating material composed of fractionated yeast cell wall and at least one member selected from the group consisting of the [viscous] thickening polysaccharides, oligosaccharides, hardened fats and oils, waxes, sugar alcohols and starch hydrolyzates.

Page 25, the paragraph bridging pages 25 and 26:

As is apparent from Table 3, samples of the invention all showed excellent flavor-lasting properties, whereas comparative samples 1 and 2 not using pullulan showed poor flavor-lasting properties, and comparative sample 2 containing an increased amount of Yeast rap poorly gave off flavor, lacked balance with dissolution time of the sugar component of the chewing gum and lacked delicious taste. Additionally, even when the fractionated yeast cell wall was used in combination with pullulan, use of an [exess] excess amount of the coating material as in the sample 5 of the invention resulted in insufficient balance with the period of dissolution of the sugar component, though flavor-lasting properties were obtained.

PRELIMINARY AMENDMENT
U.S. Appln. No. 09/866,610

Page 33, the second paragraph:

The grapefruit flavor-containing, coated powdered product was subjected to abuse [text] test at 60°C for 5 weeks. Functional evaluation was conducted by 5 special panels using a 0.1% aqueous solution of the coated powder, with rating degree of deterioration of grapefruit-like flavor in the following three levels.

Page 40, the paragraph bridging pages 40 and 41:

200 g of fine granulated sugar and 164 g of dextrin, which were both carriers, were mixed under heating to obtain a molten product. To this was added 36 g of orange flavor and, when the mixture became uniform, it was added to [anextruder] an extruder having an extrusion plate. After extrusion, the extruded product was dried to prepare an orange extrusion flavor having an average particle size of 1000 μm .

IN THE CLAIMS:

The claims are amended as follows:

1. (amended) A coating material comprising a fractionated yeast cell wall and at least one member selected from the group consisting of [viscous] thickening polysaccharides, oligosaccharides, hardened fats and oils, waxes, sugar alcohols and starch hydrolyzates.
2. (amended) The coating material as described in claim 1, wherein the [viscous] thickening polysaccharide is pullulan.
4. (amended) A coated powder comprising a core substance in a powdery or granular form of 30 to 3000 μm in an average particle size having been coated with 0.05 to 1.5 parts by weight of a coating material comprising a fractionated yeast cell

PRELIMINARY AMENDMENT
U.S. Appln. No. 09/866,610

wall and at least one member selected from the group consisting of [viscous] thickening polysaccharides, oligosaccharides, hardened fats and oils, waxes, sugar alcohols per 1 part by weight of said core substance.

5. (amended) The coated powder as described in claim 4, wherein the [viscous] thickening polysaccharide is pullulan.

7. (amended) The coated powder as described in [one of claims] claim 4 [to 6], wherein the core substance is a flavor composition, a [colour] color material, an acidity regulator, a seasoning, a sweetener, a spice, a vitamin, a functional material or a mixture of two or more of them.

9. (amended) A food or beverage composition which comprises the coated powder described in one of claims 4 to 8 and 12 to 15.

10. (amended) A perfumy cosmetic composition which comprises the coated powder described in one of claims 4 to 8 and 12 to 15.

11. (amended) A process for producing a coated powder, which comprises spraying a solution of a coating material comprising a fractionated yeast cell wall and at least one member selected from the group consisting of [viscous] thickening polysaccharides, oligosaccharides, hardened fats and oils, waxes, sugar alcohols and starch hydrolyzates against a core substance in a powdery or granular form of 30 to 3000 μm in an average particle size under stirring or in a fluidized state to thereby coat the core substance with 0.05 to 1.5 parts by weight of the coating material per 1 part by weight of said core substance.

Claims 12-15 are added as new claims.